Office Committee with evidence. (London: H. M. Stationery Office. 1921. 2s. 8d.)

Money, Prices, Credit, and Banking

Argentine International Trade under Inconvertible Paper Money 1880-1900. By JOHN HENRY WILLIAMS. Harvard Economic Studies. (Cambridge: Harvard University Press. 1920. Pp. xiv, 282. $3.50.)

This book is largely the outgrowth of an investigation made by the author in 1917 and 1918. After a preliminary discussion of principles, it takes up such topics as Argentine monetary history from 1881 to 1885, the national banking system, the interrelation of borrowings and paper money from 1885 to 1890, the period of the Baring panic, paper money and prices (including wages) in relation to the export and import trade, etc.

In his discussion of principles the author points out, rightly, that in the case of a country on an inconvertible paper standard, "an influx of gold into the country would not raise the price level, nor an outflow of gold lower it, as would be the tendency in a gold-standard country. Gold movements would not, therefore, affect exports and imports in the same way, or by the same means, as they would in a gold-using country" (p. 21). He then goes on to say: "Gold cannot, to be sure, enter into circulation, but gold coming to the country would have quite as much effect upon the value of money as if it had done so. Only, it would be the opposite effect: it would not cheapen money and raise the price level; but would cause money to appreciate and the price level to fall. It would do so by increasing the supply of gold, and thus cheapening gold in terms of paper." And elsewhere (p. 173) the author says: "In spite of this diametrical opposition of the price changes, however, the *same* result as regards foreign trade ensues as would occur in gold countries. With a favorable balance of payments, caused by new borrowings, the imports of the borrowing country are increased, and the exports discouraged; and with an 'unfavorable' change in the balance of payments the contrary set of shifts occurs. Imports diminish and exports increase."

It is, indeed, clear enough that gold coming into a paper-standard country tends to make gold cheaper in terms of paper, to reduce the premium on gold, to raise the value of the paper money in terms of gold. But it is not so clear that the inflow of gold will raise the value of the paper in terms of goods-in-general, *i.e.*, cause "the price level to fall." There is no less paper money in the country than before. There are no more goods than before. There may be fewer goods if the inflow of gold is in settlement of an export of goods. There is, conse-

quently, nothing in such an inflow of gold to make the price level fall, unless it can be shown that the inflow of gold operates to decrease credit or to disincline people to expenditure. It is, of course, entirely conceivable that a falling gold premium might cause some hoarding of the paper money by raising the hope of redemption and might so operate to reduce expenditures and to lower prices, but this is rather a possibility than a certainty. And, at any rate, it needs to be proved and explained for the specific case of Argentina between 1880 and 1900 rather than assumed.

More than this may be said. For if, as the author asserts, an inflow of gold tends to reduce the general price level in terms of the paper money; and if, as some unwary reader may infer and as the author does not deny, the general price level falls just as fast and far as the gold premium, then the author can hardly be right in asserting that "with a favorable balance of payments . . . imports . . . are increased, and . . . exports discouraged," and *vice versa* with an unfavorable balance. Gold, indeed, tends to increase in purchasing power in the countries from which it is flowing. But when these countries are all of Western Europe and the outflow is only to Argentina the effect on European prices would scarcely be pronounced. The inflowing gold, however, will buy less in the paper-money country to which it goes. For the increase of the gold tends to make it less valuable in terms of paper money and able to buy less of the paper money; while paper money prices in such a country may not decline appreciably if at all and are unlikely to decline as rapidly as the premium on gold unless there is some other influence than gold importation operating upon them. Paper money will buy more gold. It therefore becomes more profitable than before to buy gold at home for the purpose of buying goods abroad with this gold. A previous excess of exports, by causing gold to flow in and to become cheaper, makes importation profitable. But if prices should decline with the inflow of gold as fast and as far as the gold premium, such a small country might export in excess of imports, and receive a yearly balance in gold almost indefinitely. There would then be no tendency for exports to decline or imports to increase unless and until prices in the other countries with which the paper-money country traded were appreciably affected.

On the matter of the causation of a premium on gold, the reviewer is constrained to the opinion that the effect of the over-issue of paper money is greatly underrated. Thus, the author refers to depreciation in 1884-85 (p. 104) as being due "quite as much to the collapse of borrowing as to over-issue of paper money." A few pages farther on (p. 112) he says: "When one considers the events of 1884 . . . when an *unfavorable* balance of payments forced the suspension of specie

payments, there having been no increase whatever in the quantity of paper in circulation; and notes, besides, that in the four subsequent years, 1885-1888, when the balance of payments was increasingly *favorable* to Argentine, the gold premium scarcely rose at all, in spite of an increase of about 68,000,000 pesos in the paper money circulation, the conclusion appears warranted that the balance of payments, dominated as it was by borrowings of foreign capital, exercised a dominant effect upon the gold premium." And again, referring to the years 1888-91 (pp. 136-137), the author expresses the opinion "that the *chief* reason for the depreciation of paper money . . . was the cessation of borrowings, which brought a deficit in the balance of payments . . . and created a demand for gold for export."

It is reasonably obvious that in a country rapidly growing in population and industry, paper money may be increased considerably in volume without there resulting any depreciation of such paper relative to gold, *i.e.*, without an increase of the premium on gold, and without there being any increase of prices. The only effect may be to *prevent* a *fall* in the premium on gold and in prices which would otherwise take place. To minimize the effect of such paper money, then, because during the period of progressive trade activity the premium on gold does not rise or does not rise in proportion to the increased volume of paper money, is to make the subject unduly simple and the statistical evidence misleading.

Again, it is pointed out (p. 147) that in 1894 an increase of the gold premium was contemporaneous with an actual (though small) decrease of paper money. This, however, does not indicate that the volume of currency is not a cause of the premium or even that it is not the main cause. The premium might well rise, despite some decrease of money, not only because previous excessive issues had finally weakened confidence but also and even with confidence, as such, unaffected, because of credit curtailment, business depression, and falling prices in the rest of the world. The excessive issues of paper money might be the main reason for the high premium on gold just because the paper was more redundant, relative to an appreciating foreign currency based on gold, after it (the paper money) had somewhat decreased, than before. There is no intention to minimize, in this review, the significance of temporary conditions purely as such, and especially the balance due to borrowing and interest paying on the up and down fluctuations of a gold premium in a paper-standard country; but the facts which the author presents are not sufficiently complete to justify drawing the conclusion he appears to draw regarding the relative unimportance of over-issue.

One other contention of the author requires our very careful con-

sideration. He very definitely expresses the opinion (p. 174) that "a depreciating paper currency" tends "to encourage exports and diminish imports." It stimulates exports, in the author's view, because the producer for export, receiving a price abroad in terms of gold, can translate that price into a high domestic paper-money price, while certain expenses of production, such as wages and rent, do not rise with corresponding rapidity.

But why should a rise of prices more rapid than a rise in costs stimulate exports as such? If *domestic* prices rise faster than costs may it not be profitable to sell goods at home *rather than* to export them? Surely depreciation of money, in and of itself, does not encourage exports, except as inflation tends to make business in general active. This may be all the author means, but, if so, the problem is incompletely analyzed. The fact is that the special encouragement of exports as compared with sales at home is not dependent upon depreciation as such nor upon rise of selling prices more rapid than rise of costs but upon *a rise in the premium on gold more rapid than the rise in the domestic prices of the exported goods.* If the premium on gold rises more rapidly than prices of goods at home and if foreign prices do not fall, then, indeed, sale of goods abroad is more profitable than sale in the domestic market. But who shall say that a period of further inflation in a paper-standard country would necessarily cause an increase in the premium on gold *first* and a rise in prices *afterwards?* Is not the sequence even more likely, in the ordinary case, to be the other way about? The author contends, in his book, that the high premium on gold seemed largely correlated with the net obligations which Argentina had to meet abroad, and the resulting *demand* for gold for the purchase of exchange or for shipment to settle these obligations. But why should the first effect of a *further inflation of* a paper money already depreciated be to *increase the obligations to foreign countries and cause a greater demand for gold in settlement?* Is not the first effect likely to be a tendency for domestic prices to rise, the second effect a tendency for people to endeavor to escape these rising prices by purchasing abroad, and the third effect a rise in the premium on gold? If this is the sequence, then the inflation, for a while at least, contrary to the author's assertion, may make importation of goods relatively profitable until the gold premium rises about as far as domestic prices. And until the gold premium so rises, exportation may be less profitable than selling at home.

What, then, becomes of the author's inductive verification? The author attempts to show that there was some tendency for Argentine exports to be larger when the gold premium was high, although he admits that because "other things" were not "equal" the correlation is

slight (p. 235). But he apparently shows a high degree of correlation between diminished imports and a high premium on gold (p. 253). The trouble is that the evidence presented, like much of the "inductive verification" of economics, is equally consistent with another theory. It may be true that during the period of the highest premium on gold, exports were slightly increased and imports considerably decreased. But this was not due to inflation, as the author asserts, nor was it due to the high premium on gold. Rather was it probably due to the fact that Argentina had reached the point where her annual obligations for interest payable abroad exceeded new borrowings. Exports would tend to exceed imports in such circumstances equally for a gold-standard country where there was no premium. The gold premium would serve, in the case of a paper-standard country, to encourage exports and discourage imports only because the tendency would be, *in that special kind of situation*, for the gold premium to rise faster than domestic prices. Mere inflation might raise *home prices first* and so encourage buying abroad until this buying abroad increased the gold premium. But an excess of obligations in the form of interest on past borrowings would cause a demand for gold and a rise in the premium faster than and in excess of any rise of prices. This is not to say that previous or contemporary over-issue of paper may not be a fundamental factor in both the high general level of prices and the high gold premium. But granted the inconvertible paper money, the necessity of paying interest abroad, taken by itself, tends to raise the premium and does not directly tend to increase the price level.[1] Under these circumstances, exportation may be encouraged and importation discouraged. Surely, however, to say this is very different from saying even that a high premium on gold, as such, encourages exports and discourages imports; and it is still more different from saying that inflation or depreciation has such effects. To state, as does the author, that a depreciating currency acts to the exporter "like a bounty," the reviewer believes to be incorrect unless the author means merely to assert that producers for export share in the general stimulus to business which inflation sometimes occasions. But to preface the statement by the assertion (p. 174) that the depreciating currency "operates like a protective duty" is to be guilty of inconsistency. For while a protective duty may so restrict imports that exports are temporarily in excess, it in no case actually *increases* exports or acts as bounty upon them, as the author declares that depreciating paper money does.

The reviewer has been at some pains to examine carefully these few

[1] The tendency to encouragement of exports and discouragement of imports, by affecting the volume of goods in the country, may somewhat affect prices. Also, the rise of the premium may conceivably affect confidence and hoarding.

theoretical contentions not only because they seem to be such important parts of this book but also because of a sense of their great importance in any discussion of the economics of international trade and finance. The study before us is valuable as a detailed and painstaking account of most interesting occurrences. It is in places suggestive and is not without value as evidence regarding cause and effect relationships. But the comment which the reviewer feels compelled to make is that we are unlikely to get very far in the inductive verification of economic theories when the theories themselves are not clearly conceived in their sometimes intricate but nevertheless significant ramifications.

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Bank Credit: A Study of the Principles and Factors Underlying Advances Made by Banks to Borrowers. By Chester Arthur Phillips. (New York: The Macmillan Company. 1920. Pp. xiv, 374.)

The aim of this book is to give the student of banking an understanding of both its theoretical and practical aspects. The author approaches the subject from the point of view of the bank statement. After a brief introduction in which he discusses the nature of bank credit, which he defines as "credit extended by banks to borrowers" (p. 1), he shows how a bank statement is gradually built up in the course of the development of a bank's business and then discusses the relation between the different items. In this part of his exposition, which he entitles Quantitative Aspects of Bank Credit, he introduces a chapter on what he calls The Philosophy of Bank Credit in which the theory of the subject and the principal formulas he employs are developed.

Professor Phillips' contribution to this part of the subject is his criticism of the statement frequently made that an addition to a bank's reserves enables it to expand its loans to several times the amount of such addition; for example, if the reserve percentage is 25, to four times the amount, if it is 10, to ten times the amount, etc. On the contrary, Professor Phillips claims that the amount of loan expansion that can safely be made by the bank receiving the addition to its reserve is only *a little* in excess of such addition. He admits, however, that the proposition he is criticizing is correct if applied to all the banks of a system.

The basis of his argument is the claim that the new loans made by a bank in consequence of an addition to its reserve creates against it-